

**REMARKS**

Claims 1-46 were pending in the application; the status of the claims is as follows:

Claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 are rejected under 35 U.S.C. § 103(a) as being unpatentable over "Cholesteric LCDs show images after power is turned off" to Powell ("Powell") in view of U.S. Patent No. 4,802,739 to Iwamoto ("Iwamoto") and U.S. Patent No. 5,463,408 to Mio ("Mio").

Claims 3, 4, 7, 21, and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of U.S. Patent No. 6,115,033 to Choi ("Choi").

Claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Mio.

Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Mio and U.S. Patent No. 5,912,653 to Fitch ("Fitch").

Claim 33 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Iwamoto and Mio as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 above, and further in view of Fitch.

Claims 36, 39, 42, and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Mio as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 above, and further in view of Iwamoto.

Claims 1, 3, 15, 16, 19, 20, 25, 27, 28, 35, 38, 41 and 44 have been amended to more distinctly claim and particularly specify the claimed invention. These changes do not introduce any new matter.

Claims 47-54 have been added. These new claims do not introduce any new matter.

**35 U.S.C. § 103(a) Rejections**

The rejection of claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Iwamoto and Mio, is respectfully traversed based on the following.

An explanation of the cited references was included in Applicants' prior response.

In contrast to the cited references, claim 1 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a liquid crystal display device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 1 obvious. Claims 2, 5, 6, 8-14 depend from claim 1 and include every limitation of claim 1. Thus, claims 2, 5, 6, 8-14 are also not obvious over the cited references.

Also in contrast to the cited references, claim 15 recites, in part:

wherein the portable electronic device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is

capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 15 obvious. Claims 23, 24, 26, 31 and 34 depend from claim 15 and include every limitation of claim 15. Thus, claims 23, 24, 26, 31 and 34 are also not obvious over the cited references.

Also in contrast to the cited references, claim 16 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a method for driving a liquid crystal display device, wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 16 obvious. Claims 17, 18 and 32 depend from claim 16 and include every limitation of claim 16. Thus, claims 17, 18 and 32 are also not obvious over the cited references.

Also in contrast to the cited references, claim 20 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a method for driving a liquid crystal display device, wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing

image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 20 obvious.

Also in contrast to the cited references, claim 28 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit and/or at least part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a liquid crystal display device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit and/or at least part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 28 obvious. Claims 29 and 30 depend from claim 28 and include every limitation of claim 28. Thus, claims 29 and 30 are also not obvious over the cited references.

Accordingly, it is respectfully requested that the rejection of claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Iwamoto and Mio, be reconsidered and withdrawn.

The rejection of claims 3, 4, 7, 21, and 22 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Choi, is respectfully traversed based on the following.

An explanation of the cited references was included in Applicants' prior response.

In contrast to the cited references, claim 3 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least

part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a liquid crystal display device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 3 obvious. Claims 4, 7, 21 and 22 depend from claim 3 and include every limitation of claim 3. Thus, claims 4, 7, 21 and 22 are also not obvious over the cited references.

Accordingly, it is respectfully requested that the rejection of claims 3, 4, 7, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Choi, be reconsidered and withdrawn.

The rejection of claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Mio, is respectfully traversed based on the following.

An explanation of the cited references was included in Applicants' prior response.

In contrast to the cited references, claim 19 recites, in part:

wherein the portable electronic device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is

capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 19 obvious.

Also in contrast to the cited references, claim 27 recites, in part:

wherein the portable electronic device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 27 obvious.

Also in contrast to the cited references, claim 35 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a liquid crystal display device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 35 obvious. Claim 37 depends from claim 35 and includes every limitation of claim 35. Thus, claim 37 is also not obvious over the cited references.

Also in contrast to the cited references, claim 38 recites, in part:

wherein the portable electronic device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 38 obvious. Claim 40 depends from claim 38 and includes every limitation of claim 38. Thus, claim 40 is also not obvious over the cited references.

Also in contrast to the cited references, claim 41 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a method for driving a liquid crystal display device wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 41 obvious. Claim 43 depends from claim 41 and includes every limitation of claim 41. Thus, claim 43 is also not obvious over the cited references.

Also in contrast to the cited references, claim 44 recites, in part:

wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit and/or at least part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

The cited references do not disclose or suggest a liquid crystal display device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit and/or at least part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 44 obvious. Claim 46 depends from claim 44 and includes every limitation of claim 44. Thus, claim 46 is also not obvious over the cited references.

Accordingly, it is respectfully requested that the rejection of claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Mio, be reconsidered and withdrawn.

The rejection of claim 25 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Mio and Fitch, is respectfully traversed based on the following.

An explanation of the cited references was included in Applicants' prior response.

In contrast to the cited references, claim 25 recites, in part:

wherein the portable electronic device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and  
wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.



The cited references do not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Therefore, the cited references cannot render claim 25 obvious.

Accordingly, it is respectfully requested that the rejection of claim 25 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Mio and Fitch, be reconsidered and withdrawn.

The rejection of claim 33 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Iwamoto and Mio as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 above, and further in view of Fitch, is respectfully traversed based on the following.

Claim 33 depends from independent claim 15. As discussed above, claim 15 is not rendered obvious by Powell, Iwamoto, or Mio, either singly or in combination. Fitch fails to overcome the inadequacies of Powell, Iwamoto, and Mio in that Fitch also does not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command. Thus, claim 33 is not rendered obvious by Powell, Iwamoto, Mio, or Fitch, either singly or in combination.

Accordingly, it is respectfully requested that the rejection of claim 33 under 35 U.S.C. § 103(a) as being unpatentable over Powell in view of Iwamoto and Mio as applied to claims 1, 2, 5, 6, 8-18, 20, 23, 24, 26, 28-32, and 34 above, and further in view of Fitch, be reconsidered and withdrawn.

The rejection of claims 36, 39, 42, and 45 under 35 U.S.C. § 103(a), as being unpatentable over Powell in view of Mio as applied to claims 19, 27, 35, 37, 38, 40, 41, 43,

44, and 46 above, and further in view of Iwamoto, is respectfully traversed based on the following.

Claims 36, 39, 42, and 45 depend from independent claims 35, 38, 41, and 44 respectively. For at least the reasons presented above with respect to claims 35, 38, 41, and 44, claims 36, 39, 42, and 45 are also not rendered obvious by Powell or Mio, either singly or in combination.

With respect to claim 36, Iwamoto fails to overcome the inadequacies of Powell and Mio in that Iwamoto also does not disclose or suggest a liquid crystal display device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

With respect to claim 39, Iwamoto fails to overcome the inadequacies of Powell and Mio in that Iwamoto also does not disclose or suggest a portable electronic device that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

With respect to claim 42, Iwamoto fails to overcome the inadequacies of Powell and Mio in that Iwamoto also does not disclose or suggest a method for driving a liquid crystal display device wherein the liquid crystal display device is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

With respect to claim 45, Iwamoto fails to overcome the inadequacies of Powell and Mio in that Iwamoto also does not disclose or suggest a liquid crystal display device

that is capable of detecting and accepting a write command to the liquid crystal display even while at least part of the power supply circuit and/or at least part of the data processing unit is inactive, and wherein the driving circuit is capable of performing image writing on the liquid crystal display in response to the write command.

Accordingly, it is respectfully requested that the rejection of claims 36, 39, 42, and 45 under 35 U.S.C. § 103(a) as being unpatentable over Powell view of Mio as applied to claims 19, 27, 35, 37, 38, 40, 41, 43, 44, and 46 above, and further in view of Iwamoto, be reconsidered and withdrawn.

New claims 47-54 depend respectively from claims 1, 15, 19, 25, 27, 35, 38 and 44 and contain all the limitations of their respective independent claims. For the reasons described above, claims 1, 15, 19, 25, 27, 35, 38 and 44 are considered to be patentable over the cited prior art. Thus, claims 47-54 are also patentable over the cited prior art for at least the same reasons.

### **CONCLUSION**

Wherefore, in view of the foregoing remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, increases the total number of claims by 8 from 46 to 54, and does not present any multiple dependency claims. Accordingly, a Response Transmittal and Fee Authorization form authorizing the amount of \$144.00 to be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Application No. 09/522,958  
Preliminary Amendment dated December 31, 2003  
Reply to Office Action of July 1, 2003


Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: \_\_\_\_\_

  
Tung T. Nguyen  
Registration No. 42,935  
Attorney for Applicants

MAD/TTN:llb:bar:jkk  
SIDLEY AUSTIN BROWN & WOOD LLP  
717 N. Harwood, Suite 3400  
Dallas, Texas 75201  
Direct: (214) 981-3478  
Main: (214) 981-3300  
Facsimile: (214) 981-3400  
December 31, 2003